

RIVER STAGES AND FLOODS

By C. R. JORDAN

Precipitation continued heavy during May in Central and Northeastern States and in the Northwest. Rainfall was generally below normal in the South Atlantic and Gulf Coastal Plains and from Montana southward over southwestern United States.

Excessive run-off that has persisted for several months continued in the four-State area of Iowa-Missouri-Nebraska-Kansas. Bankful stages were reached or exceeded several times during the month throughout this section. Floods also occurred in northern Indiana, southern Michigan, and Ohio. Run-off was below normal in the Southeastern States, particularly in Florida, and in western Texas and Oklahoma.

St. Lawrence Drainage.—Heavy rains fell over the southern Great Lakes drainage on May 14–16 and produced overflow in southern Michigan, northern Indiana, and Ohio. Maximum stages on many of the streams of Michigan were approached, but none were exceeded.

Atlantic Slope and East Gulf of Mexico Drainages.—Light overflow was reported at widely scattered points from Connecticut to Louisiana, but no general or serious overflow occurred. Water levels in the Everglades section of Florida were the lowest since observations were started in 1939, according to the United States Geological Survey. Subnormal stream flow has prevailed in many streams of the South Atlantic States for several months.

Mississippi System.—Heavy rains were frequent throughout the month over the central and northern Mississippi Valley, and flood stages were a constant threat in Iowa, Missouri, Nebraska, and Kansas. Rainfall was generally well distributed throughout the month, and unusually high stages were not reached, although the monthly discharge of many of the streams ranked high. Flood stages were exceeded at many stations one or more times during the month as shown by the table at the end of this report. (Some stations have been omitted from the table because the data have not been received from the district centers. These stations will be included in the report for June.) The United States Geological Survey report that record-breaking floods occurred in the Nishnabotna River Basin in southwestern Iowa. The stream reached a stage of 20.5 feet at Red Oak, Iowa, on May 22, as compared to the previous highest stage of record of 18.5 feet in 1937.

The following report of a flash flood in southern West Virginia was received from the Official in Charge, Chesapeake, Ohio:

A flash flood occurred in the vicinity of Caretta, McDowell County, W. Va., on May 29, which caused near \$30,000 damages as estimated by the editor of the Welsh Daily News, of Welsh, W. Va.

No lives were lost. The property damage included fences, highways, bridges, a short section of a railroad roadbed, business houses, homes, and other buildings; two coal mines were flooded.

The storm occurred during the passage of a cold front. No estimate of the amount of rainfall could be obtained. Sixteen hundredths of an inch were recorded at Gary, W. Va. (about 10 miles from Caretta), on the morning of the 29th, and none on the following day. The damaged area lies between two ridges which are somewhat higher than the flooded area.

The lower Mississippi River and tributaries were at high stages during the early part of May, but steadily falling stages generally prevailed throughout the month. Many stations were still above flood stage at the beginning of June.

West Gulf of Mexico Drainage.—There was light to moderately severe overflow of the Sabine and Trinity Rivers in Texas and the Rio Grande in New Mexico as shown in the flood stage table.

FLOOD-STAGE REPORT FOR MAY 1945

[All dates in May unless otherwise specified]

| River and station | Flood stage | Above flood stages— dates | | Crest 1 | |
|---------------------------------------|-------------|------------------------------|---------|---------|---------|
| | | From— | To— | Stage | Date |
| ST. LAWRENCE DRAINAGE | | | | | |
| Lake Michigan | | | | | |
| Red Cedar: | Feet | | | Feet | |
| Williamston, Mich..... | 7 | 15 | 20 | 8.7 | 18 |
| East Lansing, Mich..... | 8 | 16 | 21 | 9.7 | 19 |
| Grand: Lansing, Mich..... | 11 | 18 | 20 | 11.6 | 19 |
| Lake Huron | | | | | |
| Shiawassee: Owosso, Mich..... | 7 | 17 | 20 | 8.1 | 18 |
| Lake Erie | | | | | |
| St. Joseph: Montpelier, Ohio..... | 10 | 16 | 22 | 14.3 | 18 |
| Maumee: | | | | | |
| Fort Wayne, Ind..... | 15 | 16 | 22 | 17.4 | 17 |
| Defiance, Ohio..... | 10 | 18 | 20 | 11.6 | 19 |
| Napoleon, Ohio..... | 10 | 18 | 19 | 10.5 | 19 |
| ATLANTIC SLOPE DRAINAGE | | | | | |
| Connecticut: Hartford, Conn..... | 16 | 19 | 22 | 17.6 | 21 |
| Chenango: Sherburne, N. Y..... | 8 | 18 | 18 | 8.2 | 18 |
| Chemung: Chemung, N. Y..... | 12 | 18 | 18 | 14.4 | 18 |
| Little Juniata: Spruce Creek, Pa..... | 7 | 18 | 18 | 7.9 | 18 |
| Fishing Creek: Enfield, N. C..... | 14 | 29 | 31 | 15.2 | 30 |
| Tar: Rocky Mount, N. C..... | 9 | 28 | 28 | 9.7 | 28 |
| Ocmulgee: | | | | | |
| Abbeville, Ga..... | 11 | 1 | 7 | 14.0 | 3-4 |
| Oconee: Mount Vernon, Ga..... | 16 | 3 | 6 | 17.0 | 5 |
| Altamaha: | | | | | |
| Charlotte, Ga..... | 12 | 3 | 12 | 16.3 | 8 |
| Piney Bluff, Ga..... | 17 | 6 | 9 | 17.6 | 8 |
| EAST GULF OF MEXICO DRAINAGE | | | | | |
| Apalachicola: Blountstown, Fla..... | 15 | { Apr. 27 | 9 | 19.7 | 1-2 |
| Alabama: Millers Ferry, Ala..... | 40 | { Apr. 27 | 20 | 17.0 | 17 |
| Tombigbee: | | | | 42.4 | Apr. 29 |
| Lock No. 3..... | 33 | { Apr. 29 | 5 | 41.9 | 1 |
| Lock No. 1..... | 31 | { Apr. 30 | 17 | 34.2 | 16 |
| Chickasawhay: Enterprise, Miss..... | 20 | { Apr. 29 | 5 | 33.0 | 2 |
| Pearl: Pearl River, La..... | 12 | { Apr. 29 | 1 | 21.1 | Apr. 30 |
| | | { | 3 | 12.6 | 1 |
| MISSISSIPPI SYSTEM | | | | | |
| Upper Mississippi Basin | | | | | |
| Rock: Moline, Ill..... | 10 | 16 | 24 | 10.7 | 19-20 |
| Skunk: Augusta, Iowa..... | 15 | 15 | 19 | 16.4 | 16 |
| | | 15 | 15 | 16.7 | 18 |
| | | 15 | 15 | 13.4 | 15 |
| Raccoon: Van Meter, Iowa..... | 13 | { 22 | 26 | 15.8 | 22 |
| | | { 28 | 28 | 14.0 | 25 |
| | | { 28 | 28 | 13.2 | 28 |
| Des Moines: | | | | | |
| Tracy, Iowa..... | 14 | { Apr. 28 | Apr. 30 | 14.4 | Apr. 30 |
| | | { 15 | 18 | 16.7 | 16 |
| | | { 25 | (1) | 17.6 | 27 |
| Eddyville, Iowa..... | 15 | { Apr. 28 | 1 | 15.7 | Apr. 30 |
| | | { 15 | 19 | 18.7 | 17 |
| | | { 25 | (1) | 18.6 | 27 |
| Ottumwa, Iowa..... | 9 | { Apr. 30 | Apr. 30 | 9.0 | Apr. 30 |
| | | { 15 | 19 | 13.0 | 17 |
| | | { 25 | (2) | 12.1 | 28 |
| Mississippi: | | | | | |
| Keokuk, Iowa..... | 12 | 15 | 20 | 14.5 | 17-18 |
| Quincy, Ill..... | 14 | 15 | 21 | 18.1 | 18 |
| | | | | 19.9 | Mar. 27 |
| | | | | 17.4 | Apr. 8 |
| | | | | 16.9 | Apr. 14 |
| | | | | 16.2 | Apr. 19 |
| | | | | 16.3 | Apr. 22 |
| | | | | 15.6 | Apr. 27 |
| | | | | 13.9 | 9 |
| | | | | 18.5 | 18 |
| Hannibal, Mo..... | 13 | { Mar. 19 | 12 | 18.7 | Mar. 27 |
| | | { 15 | 23 | 16.0 | Apr. 15 |
| | | { 28 | (1) | 15.4 | Apr. 19 |
| | | { 28 | (1) | 14.6 | Apr. 28 |
| Louisiana, Mo..... | 12 | { Mar. 19 | 14 | 12.6 | 8 |
| | | { 14 | 23 | 12.7 | 10 |
| | | { 25 | (1) | 17.7 | 19 |
| St. Louis, Mo..... | 30 | { Apr. 13 | 24 | 32.1 | 22 |
| Cape Girardeau, Mo..... | 32 | { Apr. 13 | 3 | 37.9 | Apr. 22 |
| | | { 20 | 27 | 34.9 | 24 |
| Missouri Basin | | | | | |
| Solomon: Beloit, Kans..... | 18 | 22 | 24 | 23.5 | 23 |
| Smoky Hill: | | | | | |
| Lindsborg, Kans..... | 21 | 22 | 24 | 24.0 | 23 |
| Enterprise, Kans..... | 26 | 26 | 28 | 27.1 | 27 |

See footnotes at end of table.